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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/785,501 | 02/20/2001 | Tomokazu Komazaki | 32011-169878 | 9075 |

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| EXAMINER | |
|---|---|
| SUMMONS, BARBARA | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2817 | |

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

A2

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/785,501 | KOMAZAKI ET AL. | |
| | Examiner | Art Unit | |
| | Barbara Summons | 2817 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *22 September 2003 (copy faxed 1/5/04)*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *21-27,29,30 and 32-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *26,27,29,30,32,39,40,42 and 47-50* is/are allowed.

6)☒ Claim(s) *21-25,33-38,41 and 43-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 February 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/305,304.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

## DETAILED ACTION

### *Withdrawn Double Patenting Rejection*

1. The terminal disclaimer filed on 9/22/03 (a copy of which was faxed to the Examiner on 1/5/04) disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Pat. No. 6,222,426 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### *New Grounds of Claim Objections*

2. Claims 47, 49 and 50 are objected to because of the following informalities:

In claim 47, on line 2, note that - - the - - should be inserted before "capacitance" (see e.g. claim 48, line 2).

In each of claims 49 and 50, on line 2, note that "alarm" should be - - arm - - (see e.g. claim 23, line 2).

Appropriate correction is required.

### *Maintained Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 30 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 recites that the "branching filter circuit" is "formed on the common piezoelectric substrate" (see lines 2-3). However, the claims from which claim 30

depends (i.e. claims 26 and 27) each recite that the "branching filter circuit is formed on the package" (see claim 26, the last two lines thereof), or on a substrate layer of a multi-layer package (see claim 27). Applicants' amendment has not rendered the claims any clearer regarding where the "branching filter circuit" is formed. It should be noted that it is the recitation of the "branching filter circuit" being "formed on the package" that renders claims 26 and 39 now allowable (see the Reasons for Allowable Subject Matter in the Office action mailed 6/20/03), but once the branching filter circuit has been recited as being "formed on the package" it cannot then be contradictorily recited that said circuit is formed elsewhere (e.g. "on the common piezoelectric substrate").

***Maintained Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 21-25, 34-38, 41, and 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikada U.S. 6,057,744 (of record) in view of Igata et al. JP 5-167388 (of record) for reasons of record.

7. Claims 21-24, 34-37, 41, and 43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Oguri et al. JP 11-68512 (of record) in view of Ikada U.S. 6,057,744 (of record) for reasons of record.

8. Claims 33, 45, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ikada U.S. 6,057,744 in view of Igata JP 5-167388 (both of record) as applied to claims 21 ands 34 above, and further in view of Hirasawa et al. JP 6-97761 (of record) for reasons of record.

***Allowable Subject Matter***

9. Claims 26, 27, 29, 30, 32, 39, 40, 42, and 47-50 are allowable over the prior art of record.

***Response to Arguments***

10. Applicant's arguments filed 9/22/03 (a copy of which were faxed to the Examiner on 1/5/04) have been fully considered but they are not persuasive.

Regarding the § 112 rejection, Applicants' argue that claim 30 is clear that the branching filter circuit is formed on the common piezoelectric substrate. This argument is not persuasive for the reasons given in paragraph 4 above.

Regarding claims 21 and 34, Applicants argue that Ikada does not teach "a frequency adjusting circuit being coupled between the antenna terminal and the transmitting SAW filter or the receiving SAW filter" (see page 14 of the amendment) and erroneously state that this is "recognized by the Office action" (see page 14, lines 10-12 of the amendment). On the contrary, the Office action finds Ikada to have a frequency adjusting circuit 28 "coupled" (i.e. at a node) "between the antenna terminal and the transmitting or receiving SAW filter". What the Office action did recognize, was that the frequency adjusting circuit of Ikada does not have a "capacitance element... that is coupled in series between the antenna terminal and the transmitting or receiving SAW filter"(see the last paragraph on page 7 of the 6/20/03 Office action). Applicants' argument is not persuasive because Igata corrects this deficiency.

Applicants next argue that Igata cannot correct the deficiency of Ikada, because the frequency adjusting circuit 28 is connected between a node parallel connection point 24 and ground potential. This argument is not persuasive, because the frequency adjusting circuits of both Ikada (Fig. 3) and Igata (Fig. 3) are the same, and Igata shows that the frequency adjusting circuit with a capacitor and an inductor in its Fig. 5 can be used in place of the inductor only circuit. The frequency adjusting circuit of Fig. 5 of Igata, used to remedy the deficiency of Ikada, is the exact same frequency adjusting circuit of Applicants' invention shown in Applicants' Fig. 2 by $C_{ANT}$ and $L_{ANT}$ wherein Applicants' $L_{ANT}$ also goes between a parallel connection point and ground. So, how can it be argued that the combination does not show the invention when the frequency adjusting circuits are the same? It should be noted that "coupled between", by its

broadest interpretation, does not provide an exact location of the coupling between the two parts it interposes, and it also does not provide a specific type of coupling, for example, being coupled in series or in parallel, and "coupled between" could even be electromagnetic as opposed to a direct electrical connection.

Applicants next argue that Oguri does not have "transmitting and receiving SAW filters" (see page 15 of the amendment). The Examiner agrees, but this argument is not persuasive because Ikada does show converting diplexers to duplexers, and this is why a 103 rejection was made to remedy the deficiency. Similarly, Applicants argue that Ikada does not show a frequency adjusting circuit with a capacitor. This argument is not persuasive because Oguri shows this feature (see C in Fig. 1). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Summons whose telephone number is (703) 308-4947. The examiner can normally be reached on M-Th, M-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pascal can be reached on (703) 308-4909. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Barbara Summons

bs
January 6, 2004

**BARBARA SUMMONS**
**PRIMARY EXAMINER**